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ABSTRACT

For methodological reasons, few studies have looked at perpetration of sexual harassment. Recent measures which emphasize specific behaviors rather than subjective definitions of harassment increase our ability to obtain valid measures of perpetration. The present study assessed the prevalence of sexual harassment perpetration in a sample of U.S. Navy men during their first year of service. It was found that over half (67%) of those surveyed reported at least one behavior that could be defined as harassment of a co-worker. Hostile attitudes towards women (measured by the Hostility Towards Women scale) and extreme masculine sex role attitudes (measured by the Hypermasculinity Inventory) were related to an increased likelihood of reporting perpetration of harassment. Similarly, both binge drinking and a history of problems related to alcohol (as measured by the Michigan Alcoholism Screening Test) were correlated in higher rates of self-reported harassment perpetration.

INTRODUCTION

Despite the large number of studies completed since the early 1980's which explore the prevalence, perception, and effects of sexual harassment, few have assessed the self-reported perpetration of harassment by men. The reasons for the dearth of perpetration studies are largely methodological; responses to direct questions about illegal or unethical behaviors are vulnerable to intentional or unintentional distortion by survey respondents. Further, research has strongly suggested that the wording of questions about harassment behaviors has significant effects on survey responses (Lengnick-Hall, 1995; Arvey & Cavanaugh, 1995.) For example, it has been shown repeatedly that people are less willing to endorse a survey item if the term "sexual harassment" is used explicitly than they are to confirm an identical experience where the term is not used (Fitzgerald, et al., 1988; Stockdale,

Vaux, & Cashin, 1995; Magley, et al, 1999.) Therefore, research on self-reported harassment has awaited instruments which focus on potentially harassing behaviors, rather than on perpetrators' subjective opinions about whether or not they have been harassers.

The scarcity of perpetration studies among self-report research makes conclusions concerning the true prevalence of sexual harassment difficult to achieve. Studies of reported experience of sexual harassment can tell us how common such experiences are, but can say little about what proportion of men are participating in sexual harassment. More importantly, data on sexual harassment perpetration would also allow research concerning its relationship to individual differences in attitudes and background between men who report perpetration and those who do not.

The Sexual Experiences Questionnaire (SEQ), a behavioral measure of self-reported harassment experiences, has been shown to have both high reliability (Fitzgerald, Gelfand, & Drasgow, 1994), and high predictive validity, as measured by the relationship of reported harassment to health, job, and psychological outcomes (Schneider, Swan, & Fitzgerald, 1997.) Research using the SEQ has suggested that harassment is pervasive in business, academic, and military settings (Bastian, Lancaster, & Reyst, 1996; Fitzgerald, et al., 1988; Rosen & Martin, 1998a); however, no study has yet applied this type of measure to assessing the self-reported harassment behaviors of men.

Types of Sexual Harassment

In 1980, Till proposed a five-factor typology for harassment and suggested that the categories could be thought of as existing on an approximate continuum of severity. Fitzgerald, et al. (1988) based the SEQ on Till's categories, but factor analysis of the instrument over several samples suggested a three factor solution: gender harassment (remarks or actions which disparage the victim's gender), unwanted sexual attention (sexual comments, unwanted requests for dates, inappropiate touching and similar behaviors), and sexual coercion (rewards or punishments contingent on sexual cooperation.)

Attitudinal Correlates of Sexual Harassment

A number of researchers have proposed a link between sexual harassment and attitudes that reflect tolerance of aggression towards women (Pryor, LaVite, & Stoller, 1993; Rosen & Martin, 1998b). Various theoretical approaches have been used as a foundation for this prediction, including sex-role spill-over theory (Gutek, 1985) which suggests that culturally accepted dictates for sexual behavior between males and females may "spill over" into non-sexual situations like the workplace, which can lead to inappropriate behavior such as sexual harassment. Presumably, the more an individual's sex-role attitudes include the notion that aggression toward women is normal and appropriate behavior for men, the more likely it would be that interactions with women in the workplace might include sexual harassment.

Work by Pryor and others has suggested that propensity to sexually harass is correlated with a number of constructs, including hostile and adversarial attitudes toward women and sexuality, and endorsement of traditional male sex roles (Malamuth, et al, 1991; Reilly, et al., 1992; Pryor, LaVite, & Stoller, 1993; Rosen & Martin, 1998b). However, most of these studies have relied on men's reports of attitudes toward sexual harassment or their self-reported likelihood to harass under hypothetical circumstances (e.g., Pryor, LaVite, & Stoller, 1994.) The current study extends these findings by looking at the relationship between self-reports of actual harassment and the Hostility Toward Women Scale (HTW, Check, 1985) and between reported harassment and the Hypermasculinity Inventory (HMI, Mosher & Sirkin, 1984). The HTW assesses the degree to which women are seen as manipulative, hostile, and unworthy of trust or respect. The HMI measures a group of

interrelated attitudes including the perception of danger as exciting, the endorsement of callous attitudes about women and sex, and the view that violence is manly. These constructs echo several of the above-mentioned attributes found to be correlated with likelihood to sexually harass.

Alcohol Misuse and Sexual Harassment

A growing body of research has linked problems with alcohol to increased risk of sexually aggressive behavior (Ullman, Karabatsos, & Koss, 1999; Wechsler, et al, 1994; Wechsler, et al, 1998). First, heavy use of alcohol may be a behavior related to the component attitudes of Hypermasculinity and Hostility Toward Women, since alcohol use is perceived as a traditionally masculine type of risky behavior and as a symbol of initiation into certain types of masculine culture (Mosher & Sirkin). Second, some harassment of co-workers may take place during off-duty hours when alcohol is available and where it could serve as a disinhibitor of inappropriate behaviors.

The purpose of the present study was to assess the prevalence and types of sexual harassment perpetrated by U.S. Navy men, through their self-reports. Additionally, the study examines the relationship of alcohol use and attitudes towards sex roles and relationships between men and women, specifically those measured by the Hostility Towards Women and Hypermasculinity Scales.

METHOD

Participants and Procedure

Participants in this study were males with at least nine months of service in the Navy. Respondents were initially surveyed in a group setting during basic training (see Merrill, et al., 1997 for a complete description of the initial survey procedure.) A randomly selected half of recruits from the initial survey provided identifying information that allowed them to be surveyed by mail again at approximately six months after completing basic training and again after one year. A total of 1,035 men completed both the initial survey and the 6 month follow-up survey. There were 490 men who completed all three phases of the survey.

Some survey information, such as ethnic background and education, was collected only at the time of the initial survey. Other information, including data on alcohol use and marital status and the HTW scale, was collected for both the initial and follow-up surveys, either because the information was subject to change over time or for use in obtaining test-retest reliabilities or both. Although this would also apply to the Hypermasculinity Inventory, the HMI was included as a predictor of future behavior and so does not appear in the follow-up. Finally, the SEQ was administered only in the follow-up questionnaires, since it was intended to measure respondents' experiences during Navy service after basic training.

The mean age of respondents at the time of the initial survey was 19.82 years (SD = 2.76). The majority of recruits were White (62.5%), 91.8% of the men were single and most were high school graduates (83.2%). Only 5.4% had not graduated from high school or completed a GED at the time of the initial survey.

Instruments

Sexual Experiences Questionnaire (SEQ). A modified version of the Sexual Experiences Questionnaire (SEQ) was used to measure perpetration of sexual harassment (Fitzgerald, et al, 1998). The original 19-item measure asks participants to indicate whether they have experienced specific behaviors that could constitute sexual harassment, for example, unwelcome requests for dates, offensive jokes or materials, or differential treatment based on response to sexual advances. The modified version for the present study used a similar sequence of items reworded to inquire whether the respondent had perpetrated the given behavior toward a co-worker, either on or off-duty, in the previous six months of active service. Wording changes were also

made on items from the original SEQ where the subjective perspective of the victim of harassment had been invoked, for example, in referring to behaviors as "unwanted." This terminology was not appropriate when considering the same behaviors from the point of view of the perpetrator.

The version of the SEQ used in the present research contains six additional items. Some were added to the instrument for the 1995 Armed Forces Survey on Sexual Harassment (the SEQ-DoD, Drasgow, et al., 1996), while others were created for the current survey. Five of the additional items represent specific forms of gender harassment that were not included in the original version, particularly nonverbal forms, such as whistling or hooting at women, staring or leering, and exposing oneself. One item created for this survey refers specifically to "unwanted sexual attention"; the other refers to being asked to respond positively to sexual or social invitations in order to be well treated on the job and is categorized as sexual coercion. The final additional item refers to a type of sexual coercion in which the respondent offered sexual favors to a co-worker in exchange for better treatment. Two items which appeared on the SEQ-DoD referring to sexual assault were not used in this study. Also excluded was an item that referred directly to sexual harassment (see Table 1).

Table 1

Items in the Sexual Experiences Questionnaire.

Gender Harassment (alpha = .79)

Repeatedly told sexual stories or jokes to women?

Made crude sexual remarks either publicly (for example, in your workplace) or to women privately?

Displayed, used, or distributed sexist or suggestive materials (for example, pictures, stories, or pornography)?

Made sexist remarks (for example, suggesting that women are not suited for the kind of work that they do)?

Put women down or were condescending to women because of their sex?

Whistled, called or hooted at women in a sexual way ? *

Made gestures or used body language of a sexual nature? *

Stared, leered, or ogled women? *

Exposed yourself physically (for example, "mooning")? *

Unwanted Attention (alpha = .80)

Made attempts to draw women into a discussion of sexual matters (for example, attempted to discuss or comment on their sex life)?

Gave women sexual attention?

Made attempts to establish a romantic sexual relationship with women despite their efforts to discourage it?

Continued to ask women for dates, drinks, dinner, etc., even though they said "No"?

Made attempts to stroke, fondle, or kiss women?

Made remarks about a woman's appearance, body or sexual activities? *

Sexual Coercion (alpha = .85)

Bribed women with some sort of reward or special treatment to engage in sexual behavior?

Made it necessary for women to respond positively to sexual or social invitations in order to be well-treated on the job?

Threatened women with some sort of retaliation for not being sexually cooperative (for example, by mentioning an upcoming review)?

Treated women badly for refusing to have sex?

Implied faster promotions of better treatment if women were sexually cooperative?

Made women afraid they would be treated poorly if they didn't cooperate sexually?

Offered to be sexually cooperative to a woman in exchange for a favor or special treatment from them (for example, offered sex in exchange for a good assignment)? *

* Items adapted from the 1995 Status of the Armed Forces Survey on Gender Issues.

Drinking and Alcohol Misuse Measures. The Michigan Alcoholism Screening Test (MAST) was created as a screening device to detect a history of problems with alcohol which might indicate alcoholism (Selzer, 1971). A review of validity studies of the MAST concluded that it is in accord with clinical diagnoses, self-identification, spouse or family evaluation, and other diagnostic criteria for alcoholism in approximately 75% of cases (Gibbs, 1983.) When inconsistencies are shown, the MAST tends to produce false positive identifications of alcoholics, and this may be particularly true for adolescent and young adult samples, who may be going through peak periods of heavy drinking (Brady, et al., 1982). Gibbs (1983) reports a range of .83 to .93 for Cronbach's alpha in tests of internal consistency. It should be noted, however, that scores for respondents in this study were computed from a shortened version of the MAST, as will be discussed below. Gibbs (1983) reports that the range of reliabilities for other shortened versions of the MAST has been .60 to .81. The internal consistency for the MAST in the present sample was within this range at .70.

Due to a transcription error in initial surveys administered between June 1996 and December 1996, an incorrect item was substituted for the MAST item "Do friends and relatives think you are a normal drinker?" Although the correct item was reinstated in January of 1997 and in all follow-up surveys, a decision was made to exclude this item, as well as a similar item "Do you feel you are a normal drinker?" to

improve validity. Several researchers (Alexander & Mangelsdorff, 1994; Harburg, 1988) have presented evidence that these two items are frequently answered in the negative by nonalcoholics and nondrinkers, who believe that they are not perceived as normal drinkers because they drink less than their reference group. Including these items would thus tend to inflate the number of individuals who are categorized as alcoholics or possible alcoholics.

In addition to the MAST, a question inquired how often respondents had had five or more drinks at a sitting during the two weeks previous to completing the questionnaire. Consumption of five or more drinks in a row has been defined as a "binge" for male drinkers by Wechsler and colleagues (Wechsler, et al, 1994.) Binge drinking has been associated with a variety of negative consequences, including driving while intoxicated, conflicts with friends, family, or coworkers, and sexual aggression (Wechsler, et al., 1994; 1998).

Hostility Toward Women Scale (HTW). The Hostility Toward Women Scale (HTW) was developed to measure attitudes characterized by distrust, anger, and resentment toward women (Check, 1985). A number of studies have found relationships between higher levels of hostility toward women and willingness to behave in sexually aggressive ways toward women (e.g., Malamuth, 1986) In a study of U.S. Army personnel Rosen and Martin (1998) found higher levels of hostility toward women to be related to more tolerant attitudes toward sexual harassment.

Internal reliability for the HTW scale has generally been good. Rosen & Martin's (1998) study, which included over 1,000 male soldiers reported an alpha coefficient of .82. In the present sample, alpha was found to be .85.

Hypermasculinity Inventory (HMI). Mosher and Sirkin (1984) developed the Hypermasculinity Inventory to measure a set of attitudes consisting of "...three related components: (a) calloused sex attitudes toward women, (b) a conception of violence as manly, and (c) a view of danger as exciting (p.151)." The authors report that high scores on the scale were related to drug and alcohol use and delinquent behavior. Mahoney, Shively, & Traw (1986) reported a relationship between the HMI and self-reported sexually coercive behaviors in college men, and Norris, et al. (1999) found that high scorers who had also consumed alcohol were less empathetic toward a fictional rape victim, and men who were high in hypermasculinity were more likely to identify with the rapist in the same hypothetical scenario.

The standard HMI consists of 30 items, 29 of which were used for the present survey. One item which involved attitudes towards lesbians was omitted in deference to U.S. Navy policy. Mosher & Sirkin report a Cronbach's alpha coefficient of .89 for the total scale. The alpha for the current sample, using the 29-item scale was .84.

RESULTS

Rates of Self-Reported Perpetration of Sexual Harassment

Approximately 67% (n = 678) of men in the sample reported at least one instance of behavior which could be construed as sexual harassment. Table 2 presents the percentages of the total sample reporting each type of behavior, without regard to whether or not multiple types were reported by the same respondent. The most commonly reported type was gender harassment, followed by unwanted sexual attention. Sexual coercion, the most severe form of harassment, was least often reported.

Table 2
Percent of Total Sample Reporting Each Type of Harassment.

	6 Months		12 Months	
Harassment Type	n	Percent	n	Percent
Gender Harassment	600	59.7	275	56.6
Unwanted Attention	567	56.1	255	52.8
Sexual Coercion	51	5.0	15	3.1

Percentages were also calculated for respondents categorized according to the most severe type of harassment behavior they reported (see Table 3). It was most common for respondents to report more than one type of harassment behavior; only about 10% of those who reported any harassment behavior said it had been limited to gender harassment alone. However, virtually all respondents (98%, n = 50) who reported an instance of sexual coercion also reported instances of both gender harassment and unwanted sexual attention. Only one individual endorsed sexual coercion as his only behavior on the SEQ. Approximately, 15% (n = 107) of those whose most severe harassment behavior was unwanted sexual attention also reported one or more instances of gender harassment. The most common report was either unwanted sexual attention or a combination of unwanted attention and gender harassment.

Table 3
Most Severe Sexual Harassment Type Reported.

	6 Months		12 Months	
Harassment Type	n	Percent	n	Percent
None	327	32.7	168	35.2
Gender Harassment	106	10.6	57	11.9
Unwanted Attention	516	51.6	237	49.7
Sexual Coercion	51	5.1	15	3.1

Although it can be argued that gender harassment, unwanted attention, and sexual coercion form a continuum of severity, the type of behavior is not the only determinant of whether harassment has taken place. Another is the number of times potentially harassing behaviors are repeated. For example, requesting a date once from a co-worker who refuses would not be likely to be perceived as harassment, though continuing to do so after a refusal could be construed as such. In an effort to compute a measure of chronicity, four continuous harassment scores were computed by adding the number of non-zero responses to individual SEQ items for the total scale, and for each of the subscales. Table 4 shows the descriptive statistics for continuous harassment scores for the 6 month administration of the SEQ. Total scores ranged from 0 to 77, out of a possible 96. Scores for gender harassment ranged from 0 to 32 out of a possible 40, and scores for unwanted attention ranged from 0 to 24 out of a possible 28. Finally, scores for sexual coercion ranged from 0 to 21 out of a possible 24.

Table 4
Descriptive Statistics for Continuous Sexual Experiences Questionnaire (SEQ) Scale Scores.

Scale	n	Mean	SD
Gender Harassment	1024	2.45	3.83
Unwanted Sexual Attention	1035	2.35	3.43
Sexual Coercion	1035	0.17	1.14
Total Scale	1016	5.17	7.36

The use of continuous scores on the SEQ should be considered exploratory. These scores give an estimate of the history of sexual harassment behaviors reported by an individual. However, all types of behavior are given equal weight, so that a person reporting frequent performance of a relatively innocuous behavior, such as sexual jokes, might score as high or higher than someone who reports an infrequent but serious breach of conduct such as threatening a co-worker with reprisals for refusing sex. Further, the SEQ provides no indication of whether behaviors were perpetrated toward a single person or toward multiple individuals, another factor which might affect perception of the behavior as harassment. It is unclear, for example, whether frequent sexist comments spread out among many different targets should be considered more or less harassing than fewer comments focused on a single person. As a measurement issue, this problem is somewhat reduced by looking at the individual subscales of the SEQ, and thus considering both type and frequency of behavior. It is also mitigated by the fact that persons who reported sexual coercion also, almost universally, reported other types of harassment behavior.

Correlations Among Predictor Variables

Table 5 presents the zero-order correlations for the predictor variables used in this study. Drinking variables were represented by the continuous MAST scores and by number of binges in the previous two weeks for all three phases of the survey. HTW scores for all three surveys were also included, as well as scores for the HMI, which only appeared on the initial survey.

Table 5
Correlations Among Predictor Variables*

Variable	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
1. MAST	---									
2. MAST 6 mo.	.39	---								
3. MAST 12 mo.	.35	.57	---							
4. Binges	.43	.35	.29	---						
5. Binges 6 mo.	.21	.43	.41	.34	---					
6. Binges 12 mo.	.19	.31	.45	.35	.48	---				
7. HMI	.25	.27	.26	.36	.25	.28	---			
8. HTW	.20	.16	.14	.14	.13	.09	.27	---		
9. HTW 6 mo.	.08	.21	.12	.05	.14	.10	.14	.61	---	
10. HTW 12 mo.	.12	.19	.26	.04	.15	.24	.16	.57	.69	---

*All correlations are significant at the .01 level (2-tailed)

Due in part to the large sample sizes, all predictor variables were found to be correlated at $p < .01$ or less. The largest correlations among drinking variables ($r > .40$) were found to be those which were most closely related in time. Thus, the 6 and 12 month MAST scores, and the 6 and 12 month binge drinking scores were highly correlated. Similarly, MAST and binge scores measured on the same version of the survey were most highly correlated (See Table 5).

Scores for the three administrations of the HTW scale showed strong correlations with each other, ranging from .57 to .69. However, HTW scores were not highly correlated with the drinking variables, with r's ranging from .04 to .26.

The HMI showed a consistent, moderate correlation with drinking variables, with r's ranging from .25 to 36. The HMI correlated with HTW at .27 for the initial survey, but correlations with subsequent versions of the HTW were more modest: .14 and .16 for 6 months and 12 months, respectively.

Sexual Harassment and Alcohol Misuse

The MAST was administered both at the time of the initial questionnaire and on the follow-up surveys. The initial administration of the scale required respondents to answer based on whether they had ever had a drink of alcohol. The follow-up questionnaires asked about experiences with alcohol during the six months prior to filling out the survey. On the initial questionnaire, 14.1% ($n = 413$) men were classified as lifetime nondrinkers. Of those who reported having consumed alcohol, 57.5% ($n = 1300$) were categorized as nonalcoholic, 8.6% ($n = 194$) as possibly alcoholic, and 33.9 ($n = 765$) as alcoholic.

Initial MAST scores are the most useful in the current analysis because they reflect drinking patterns over a longer period in the lives of the respondents. It is also useful, however, to look at the patterns of drinking behavior on the follow-up questionnaires which inquire about alcohol problems during the same time period for which harassment behaviors are being assessed. On the 6 month follow-up MAST 30.4% ($n = 315$) of respondents were classified as nondrinkers, according to their report of consumption during the previous six months only. Of those who reported having consumed alcohol in the previous six months, 75% ($n = 501$) were classified as nonalcoholic, 7% ($n = 47$) as possibly alcoholic, and 18% ($n = 120$) as alcoholic.

On the 12 month survey, 30% of respondents ($n = 147$) reported that they had not had a drink in the previous 6 months. Among drinkers, 69.1% ($n = 224$) scored as nonalcoholic, 9% ($n = 29$) as possibly alcoholic and 21.9% ($n = 71$) as alcoholic.

In order to assess the relationship of alcohol use to sexual harassment, multivariate analyses of variance (MANOVA) were performed using the three sets of MAST categorizations as the independent variables, and continuous sexual harassment subscale scores as the dependent variables. It was found that harassment scores at 6 months differed across categories on the initial MAST. The overall F for the MANOVA was significant ($F(9, 2319) = 5.03$, $p < .001$, Wilks' Lambda = .954), which indicated that tests of the individual continuous sexual harassment subscales would be appropriate. Table 6 shows the results of these individual tests. The general pattern shows that nondrinkers had significantly lower harassment scores than those in the other categories and that those categorized as alcoholic had significantly higher harassment scores. Possible alcoholics had higher harassment scores than nondrinkers, but did not significantly differ from nonalcoholic drinkers. Table 7 displays the scale means for each group.

Categorization on the initial MAST did not predict harassment scores at 12 months (multivariate $F < 1$). However, categorization on the 6 month MAST and 12 month MAST showed significant relationships to harassment subscale scores on their respective versions of the SEQ ($F(9, 2343) = 8.27$, $p < .002$, Wilks' Lambda = .927 at 6 months; ($F(9, 632) = 4.87$, $p <$

Table 6

Univariate ANOVAs: Continuous Sexual Harassment Scores by MAST Category.

	F	Error df	Prob.	Model R^2
Initial MAST/6 mo. SEQ				
Gender Harassment	10.61	955	.000	.032
Unwanted Attention	11.53	955	.000	.035
Sexual Coercion	2.94	955	.032	.009
6 mo. MAST/6 mo. SEQ				
Gender Harassment	16.62	965	.000	.049
Unwanted Attention	20.49	965	.000	.060
Sexual Coercion	10.58	965	.000	.032
12 mo. MAST/12 mo. SEQ				
Gender Harassment	10.72	262	.000	.109
Unwanted Attention	12.14	262	.000	.122
Sexual Coercion	4.82	262	.003	.052

.001, Wilks' Lambda = .850). Table 6 shows the results of the univariate tests.

On the univariate tests comparing MAST categorization at 6 and 12 months with their respective SEQs, it was found that harassment subscales scores increased significantly as problems with alcohol increased. Table 7 shows the means for the harassment subscales; contrasts showed that all differences between MAST categories were significant, with the exception of nondrinkers and nonalcoholic drinkers.

Table 7

Mean Continuous Sexual Harassment Subscale Scores by MAST Category.

	Nondrinker	Nonalcoholic	P. Alcoholic*	Alcoholic
Initial MAST/6 mo. SEQ				
Gender Harassment	1.52	2.20	2.02	3.58
Unwanted Attention	1.74	2.08	2.12	3.52
Sexual Coercion	0.21	0.08	0.03	0.34
6 mo. MAST/6 mo. SEQ				
Gender Harassment	1.64	2.36	3.30	4.41
Unwanted Attention	1.67	2.29	3.39	4.43
Sexual Coercion	0.08	0.09	0.26	0.73
12 mo. MAST/12 mo. SEQ				
Gender Harassment	3.11	4.11	5.33	7.22
Unwanted Attention	2.34	2.98	3.40	6.04
Sexual Coercion	0.00	0.04	0.13	0.28

*Possible alcoholic

Binge Drinking and Sexual Harassment

Of those who reported drinking alcohol in the previous six months, 64.9% (n = 430) at 6 months and 63.7% (n = 207) at 12 months said that they had binged at least once in the two weeks previous to the survey. To look at the predictive relationship between bingeing and sexual harassment, binary logistic regressions were run on reported binge drinking in relation to the corresponding SEQ. The results are reported in Table 8. It was found that binge

drinking did not significantly increase the likelihood of reporting either gender harassment or unwanted sexual attention. However, at both 6 and 12 months, men who reported at least one episode of binge drinking were more than 7 times more likely to report sexual coercion than those who had not binged.

Table 8
Results of Logistic Regressions of Binge Drinking on Dichotomous Sexual Harassment Variables.

Harassment Type	Beta	SE	Odds ratio	95% CI
6 Months				
Gender Harassment	0.15	0.17	1.16	.83 – 1.63
Unwanted Attention	0.27	1.67	1.31	.94 – 1.82
Sexual Coercion	2.03	0.60	7.65	2.34 – 25.02
12 Months				
Gender Harassment	0.30	0.24	1.35	0.85 – 2.16
Unwanted Attention	0.46	0.24	1.59	1.00 – 2.53
Sexual Coercion	2.04	1.04	7.71	0.99 – 59.72

Sexual Harassment, Hostility Toward Women and Hypermasculinity

In order to test the relationship of HTW and HMI scores to sexual harassment, a set of dichotomous variables was created, using a median split, and a series of bivariate logistic regressions were performed. For considerations of space, in the current report only the initial HTW and HMI scores were used in the present analyses. Further studies are planned which will relate attitudes and self-reported perpetration of harassment when the two are measured concurrently. (Note: The predictor variables were entered in separate models, since Hostility Toward Women and Hypermasculinity are related concepts and scores are significantly correlated ($r = .25$, $p < .01$)) Tables 9 and 10 shows the results of these regressions.

Table 9
Results of Logistic Regressions of HTW and HMI on Sexual Harassment Subscales (6 Months.)

Variables	Beta	SE	Odds ratio	95% CI
Gender Harassment				
HTW (N = 1009)	0.90	0.13	2.45	1.89-3.17
HMI (N = 893)	0.37	0.14	1.44	1.10-1.89
Unwanted Attention				
HTW (N = 1009)	0.84	0.13	2.31	1.79-2.98
HMI (N = 893)	0.48	0.14	1.62	1.23-2.11
Sexual Coercion				
HTW (N = 1009)	1.65	0.41	5.20	2.31-11.71
HMI (N = 893)	1.08	0.36	2.94	1.46-5.89

Table 10
Results of Logistic Regressions of HTW and HMI on Sexual Harassment Subscales (12 Months.)

Variables	Beta	SE	Odds ratio	95% CI
Gender Harassment				
HTW (N = 490)	0.41	0.19	1.50	1.04 – 2.16
HMI (N = 490)	0.08	0.20	1.08	0.73 – 1.59
Unwanted Attention				
HTW (N = 490)	0.55	.019	1.73	1.20 – 2.50
HMI (N = 490)	0.03	0.20	1.03	0.70 – 1.51
Sexual Coercion				
HTW (N = 490)	1.77	0.77	5.85	1.30 – 26.20
HMI (N = 490)	1.16	0.68	3.20	0.84 – 12.25

It was found that the two attitude variables showed similar patterns of predictive success in relation to sexual harassment at 6 months. Both were significantly related to all three types of sexual harassment, but most strongly to sexual coercion. HTW scores were the stronger predictor, with participants scoring above the median on the HTW over twice as likely to report gender harassment and unwanted attention and over five times as likely to report sexual coercion. Those scoring high on the HMI were approximately1.5 times as likely to report gender harassment and unwanted attention and nearly three times as likely to report sexual coercion.

At 12 months HTW remained a significant predictor of harassment, particularly in the case of sexual coercion, which was almost 6 times as likely to be reported by those high in HTW. However, prediction of harassment by HMI scores no longer reached statistical significance at 12 months.

DISCUSSION

The majority of men surveyed after at least six months in the Navy reported that they had engaged at least once in a behavior toward a female co-worker which could be defined as sexual harassment. Most of these instances involved gender harassment or unwanted sexual attention or both. However, over 5% of respondents stated that they had used threats or bribes in an attempt gain sexual favors from a co-worker. In almost all cases, the self-report of sexual coercion was accompanied by reports of both gender harassment, and unwanted attention, suggesting that some men develop chronic and pervasive patterns of potentially harassing behavior toward their female co-workers.

Such a pattern was found to be related to hostile attitudes toward women and to a mind-set in which masculinity is defined by risk-taking and a callous approach toward sexual behavior. While these attitudes are ones which the recruits in this sample brought with them into the Navy, it is possible that working conditions, peers' behavior, and the attitudes toward sexual harassment manifested by the Navy (both as represented by immediate superiors and the by the organization as a whole) could encourage or discourage them.

Along with sex-role attitudes, a history of problems with alcohol was shown to be related to sexual harassment. As was mentioned earlier, drinking problems could effect sexual harassment through their correlation with related attitudes, such as equating heavy alcohol use with masculinity. At the same time, heavy drinking itself could encourage harassment through the disinhibition of behavior. These two factors are not mutually exclusive: The HMI, which measures attitudes about masculinity, contains specific references to drinking as an activity that releases inhibitions on aggressiveness and sexual

behavior ("When I have a few drinks under my belt, I look for trouble," "When I have a drink or two I feel ready for whatever happens," and "Get a woman drunk, high, or hot and she'll let you do whatever you want.") Further, although there is no direct evidence provided by the self-reports given in this study, the relationship of binge drinking to harassment suggests that some instances of sexual coercion could occur during occasions of heavy alcohol consumption. Norris, et al. (1999) reported that alcohol consumption by men who were high in hypermasculinity led to less empathy for a hypothetical rape victim and less sensitivity to cues in the scenario which portrayed the victim's distress. Other studies have also found that men high in traditional beliefs about masculinity (e.g., that men should suppress emotion and avoid "feminine" behavior) may run an increased risk of alcohol problems (McCreary, Newcomb, & Sadava, 1999).

The primary limitation of the present study is the use of self-report data. Participants are reporting on undesirable or even illegal behavior, including sexual harassment and alcohol misuse and, in some cases, underage drinking. Both the SEQ and the MAST were designed to minimize problems with self-report by asking respondents to endorse specific behaviors, rather than opinions. However, it is probable that both of these measures have some inherent biases. As was mentioned earlier, the MAST probably overestimates the number of alcoholics in a sample. It has also been argued that the SEQ underestimates the occurrence of sexual harassment, particularly sexual coercion, though not as seriously other measures of harassment. These inherent weaknesses in the measures are reduced by using a longitudinal design, which can track alcohol misuse and harassment over time and connect them to negative outcomes, such as health problems and attrition from the Navy.

A further limitation is the decrease in sample size from the initial to the follow-up questionnaires. An analysis of return rate which took discharges from the Navy into account estimated a return-rate of about 43% at six months and about 31% at 12 months among those who received a survey. Clearly, the variables being examined in this report would probably tend to be more prevalent among those who were discharged at some point during the survey. Further analyses are planned using discharge information.

While many environmental factors, such as the ratio of men and women on the job and the pre-existing climate of acceptance or censure of sexual harassment in a particular workplace undoubtedly influence levels of sexual harassment, the current study also provides insight into the ways in which individual differences can contribute. This is particularly important in the effective construction of programs directed toward reducing harassment. Such programs are aimed at the individual, traditionally focusing on defining what behaviors might constitute sexual harassment. This focus could be extended to make participants more aware of attitudes and assumptions they hold which can contribute to their increased risk of perpetrating sexual harassment.

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14. ABSTRACT (maximum 200 words)

Participation in this study were males with at least 9 months of service in the Navy. Respondents were initially surveyed during basic training using a questionnaire assessing demographics, alcohol use and other factors. Follow-up questionnaires were administered by male and included a measure of harassment perpetration, as well as measures of hostility toward women, hyper masculinity, and alcohol misuse. Descriptive statistics, bivariate comparisons, and logistic regression techniques were used to analyze the data.

A Substantial number of recruits reported at least one instance of potentially harassing behavior at 6 months and again at 12 months after completing basic training. Our analyses also showed that problems with alcohol and binge drinking were associated with higher levels of self-reported harassment perpetration. Finally, we found that hostile attitudes toward women and negative attitudes concerning relationships between men and women were related to a significantly greater likelihood of attempting to threaten or bribe a coworker into sexual relations, according to recruits' self-reports.

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